DEC. 16. 2005 3:10PM · (3) FISH & RICHARDSON 6175428906 NO. 6155

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Attorney's Docket No.: 10559-430001 / P10444

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# Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

# <u>Listing of Claims</u>:

### 1-8. (Canceled)

9. (Previously presented) A method comprising:

generating a request from a mobile-device, the request comprising a request-layer including a home-address of the mobile-device and a server-address;

encapsulating the request-layer with a roaming-layer including a real-address of the mobile-device and a home-agent-address;

communicating the encapsulated request-layer to a home-agent based on the home-agent-address;

using a program layer below a transmission control protocol/internet protocol (TCP/IP) program layer in the mobile-device to generate the request, encapsulate the request-layer and communicate the encapsulated request-layer;

removing the roaming-layer from the encapsulated request-layer; and communicating the request-layer from the home-agent to a server based on the server-address.

# 10. (Canceled)

11. (Previously presented) The method of claim 9 further comprising:
generating a response to the request from the home-agent to the server, the response
including a response-layer having the server-address and the home-agent-address; and
communicating the response to the home-agent.

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12. (Original) The method of claim 11 further comprising:

encapsulating the response with a roaming-layer, including the real-address and the home-address of the mobile-device; and

communicating the encapsulated response to the mobile-device.

#### 13. (Canceled)

- (Previously presented) The method of claim 9 including using the program layer 14. below a transmission control protocol/internet protocol (TCP/IP) program layer in the homeagent to modify the encapsulated request-layer with the roaming-layer and communicate the request-layer.
  - (Currently amended) A communication system comprising: 15.

a home-agent;

a server; and

a mobile-device including a processor configured to:

generate a request from the mobile-device, the request comprising a request-layer including a home-address of the mobile-device and a server-address of the server,

encapsulate the request-layer with a roaming-layer including a real-address of the mobile-device and a home-agent-address,

communicate the encapsulated request-layer to the home-agent based on the home-agent-address; and

use respective program layers below transmission control protocol/internet protocol (TCP/IP) program layers in the mobile-device and the home-agent to establish a communication path and maintain a communication path between the home-agent and the mobile-device.

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16. (Previously presented) The system of claim 15 wherein the home-agent includes a processor configured to remove the roaming-layer from the encapsulated request-layer and communicate the request-layer from the home-agent to the server based on the server-address.

17. (Previously presented) The system of claim 15 wherein the home-agent includes a processor configured to:

encapsulate a response with a roaming-layer, including the real-address and the home-address of the mobile-device and

communicate the encapsulated response to the mobile-device.

18. (Previously presented) A mobile-device comprising:

a network-interface-adapter;

a processor configured to:

generate a request comprising a request-layer including a home-address of the mobile-device and a server-address,

encapsulate the request-layer with a roaming-layer including a real-address of the mobile-device and a home-agent-address,

communicate the encapsulated request-layer through the network-interfaceadapter to a home-agent based on the home-agent-address; and

use respective program layers below transmission control protocol/internet protocol (TCP/IP) program layers in the mobile-device and the home-agent to establish a communication path and maintain a communication path between the home-agent and the mobile-device.

- 19. (Canceled)
- 20. (Previously presented) A home-agent comprising: a network-interface-adapter;

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a processor configured to:

receive a request-layer encapsulated with a roaming layer, the request-layer including a server address,

remove the roaming-layer from the encapsulated request-layer, and communicate the request-layer through the network-interface-adapter to a server based on the server-address, wherein

the processor uses respective program layers below transmission control protocol/internet protocol (TCP/IP) program layers.

(Currently amended) The home-agent of claim 20, the processor configured to: 21. receive a response from the server;

encapsulate the response with a roaming-layer including a real-address and a homeaddress of the a mobile-device, and

communicate the encapsulated response to the mobile-device.

22-24. (Canceled)

(Previously presented) An article comprising a computer-readable medium that 25. stores computer-executable instructions for causing a computer system to:

generate a request from a mobile-device, the request comprising a request-layer including a home-address of the mobile-device and a server-address;

encapsulate the request-layer with a roaming-layer including a real-address of the mobiledevice and a home-agent-address;

communicate the encapsulated request-layer to a home-agent based on the home-agentaddress; and

use respective program layers below transmission control protocol/internet protocol (TCP/IP) program layers in the mobile-device and the home-agent to establish a communication path and maintain a communication path between the home-agent and the mobile-device.

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26. (Previously presented) The article of claim 25 including instructions for causing the computer system to:

remove the roaming-layer from the encapsulated request-layer; and communicate the request-layer from the home-agent to a server based on the server-address.

- 27. (Previously presented) The article of claim 25 including instructions to:
  generate a response to the request from the home-agent to a server, the response including
  a response-layer containing the server-address and the home-agent-address; and
  communicate the response to the home-agent.
- 28. (Currently amended) The article of claim 25 27 including instructions to:
  encapsulate the response with a roaming-layer including the real-address and the homeaddress of the mobile-device; and
  communicate the encapsulated response to the mobile-device.
  - 29. (Canceled)
- 30. (New) A computer-readable medium storing computer instructions that when executed on a processor-based device cause the processor based device to:

generate a request from a mobile-device, the request comprising a request-layer including a home-address of the mobile-device and a server-address;

encapsulate the request-layer with a roaming-layer including a real-address of the mobiledevice and a home-agent-address;

communicate the encapsulated request-layer to a home-agent based on the home-agent-address;

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use a program layer below a transmission control protocol/internet protocol (TCP/IP) program layer in the mobile-device to generate the request, encapsulate the request-layer and communicate the encapsulated request-layer;

remove the roaming-layer from the encapsulated request-layer; and communicate the request-layer from the home-agent to a server based on the serveraddress.

(New) The computer-readable medium of claim 30 further comprising 31. instructions that cause the processor-based device to:

generate a response to the request from the home-agent to the server, the response including a response-layer having the server-address and the home-agent-address; and communicate the response to the home-agent.

(New) The computer-readable medium of claim 31 further comprising 32. instructions that cause the processor-based device to:

encapsulate the response with a roaming-layer, including the real-address and the homeaddress of the mobile-device; and

communicate the encapsulated response to the mobile-device.

- (New) The computer-readable medium of claim 30, wherein the computer 33. instructions that cause the processor-based device to use the program layer below the transmission control protocol/internet protocol (TCP/IP) program layer in the home-agent include computer instructions that cause the processor-based device to modify the encapsulated request-layer with the roaming-layer and communicate the request-layer.
- (New) The mobile-device of claim 18, wherein the processor is further 34. configured to:

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receive an encapsulated communication from the home agent, the communication includes a response to a request from the home-agent to the server, the response including a response-layer having the server-address and the home-agent address.

35. (New) The mobile-device of claim 34, wherein the communication is encapsulated with a roaming layer, including the real-address and home-address of the mobile device.

36. (New) A mobile-device comprising:

a network-interface-adapter;

a memory storing instructions which, when accessed, result in performing:

generating a request comprising a request-layer including a home-address of the mobile-device and a server-address,

encapsulating the request-layer with a roaming-layer including a real-address of the mobile-device and a home-agent-address,

communicating the encapsulated request-layer through the network-interfaceadapter to a home-agent based on the home-agent-address; and

using respective program layers below transmission control protocol/internet protocol (TCP/IP) program layers in the mobile-device and the home-agent to establish a communication path and maintain a communication path between the home-agent and the mobile-device.

37. (New) The mobile-device of claim 36, wherein the memory includes further instructions which, when accessed, result in performing:

receiving an encapsulated communication from the home agent, the communication includes a response to a request from the home-agent to a server, the response including a response-layer having the server-address and the home-agent address.

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38. (New) The mobile-device of claim 37, wherein the communication is encapsulated with a roaming layer, including the real-address and home-address of the mobile device.

39. (New) A proxy driver for a mobile device comprising:

a network-interface-adapter;

a memory storing instructions which, when accessed, results in performing:

receiving a request-layer encapsulated with a roaming layer, the request-layer including a server address,

removing the roaming-layer from the encapsulated request-layer, and communicating the request-layer through the network-interface-adapter to a server based on the server-address,

wherein the memory includes respective program layers below transmission control protocol/internet protocol (TCP/IP) program layers.

(New) The proxy driver of claim 39, wherein the memory includes further 40. instructions that, when accessed, result in performing:

receiving a response from the server;

encapsulating the response with a roaming-layer including a real-address and a homeaddress of a mobile-device, and

communicating the encapsulated response to the mobile-device.

- (New) A communication system comprising: 41.
- a home-agent;
- a server; and
- a mobile-device including a memory storing instructions that, when accessed, result in performing:

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generating a request from the mobile-device, the request comprising a requestlayer including a home-address of the mobile-device and a server-address of the server, encapsulating the request-layer with a roaming-layer including a real-address of the mobile-device and a home-agent-address,

communicating the encapsulated request-layer to the home-agent based on the home-agent-address; and

using respective program layers below transmission control protocol/internet protocol (TCP/IP) program layers in the mobile-device and the home-agent to establish a communication path and maintain a communication path between the home-agent and the mobile-device.

- 42. (New) The system of claim 41 wherein the home-agent includes a memory storing instructions that, when accessed, result in performing removing the roaming-layer from the encapsulated request-layer and communicating the request-layer from the home-agent to the server based on the server-address.
- 43. (New) The system of claim 41 wherein the home-agent includes a memory storing instructions that, when accessed, result in performing:

encapsulating a response with a roaming-layer, including the real-address and the home-address of the mobile-device, and

communicating the encapsulated response to the mobile-device.